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PATENT

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Signature

Applicant	: Werner Taubmann, et al.
Application No.	: 09/647,899
Filed	: October 6, 2000
Title	: SPINDLE OR WORM DRIVE FOR ADJUSTING DEVICES IN MOTOR VEHICLES
Grp./Div.	: 3634
Examiner	: Gregory J. Strimbu
Docket No.	: 40551/MEG/M521

INFORMATION DISCLOSURE STATEMENT
37 CFR § 1.97(b)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Post Office Box 7068
Pasadena, CA 91109-7068
March 23, 2004

Commissioner:

In compliance with the duty of disclosure under 37 CFR §§ 1.56, 1.97 and 1.98, and in accordance with the provisions in the Manual of Patent Examining Procedure §§ 609 and 707.05(b), enclosed is FORM PTO/SB/08A/B listing the references that are known to applicant. Copies of each of the listed references are enclosed. This filing is timely because it is made during one of the periods described in 37 CFR § 1.97(b).

It is respectfully requested that the listed references be considered in the examination of this application and identified on the list of references cited on the patent issuing for this application. Applicant also requests that an initialed copy of FORM PTO/SB/08A/B be entered in the application file and returned to applicant with the next communication from the Office in accordance with MPEP § 609.

Enclosed are copies of photographs of two drive units which were brought to Applicant's attention by a third party and/or by BMW.

Exhibit A relates to a BMW Z3 drive unit which is similar to the drive unit described in U.S. Patent No. 5,349,878 (White et al.). The third party has asserted that Rockwell, the assignee of the White et al. patent, delivered the drive unit for the BMW Z3. It is believed that the BMW Z3 drive unit was in public use in the U.S. prior to 1998.

The drive unit comprises a rotating spindle driven by a worm gear and a helical gear which are located within a gear housing made of two parts. The gear housing is fixed at one end of the upper rail of a seat rail assembly consisting of a fixed lower rail and a movable upper rail. The housing is located outside the hollow cavity defined by the two rails whereas the threaded spindle and a stationary drive nut are located within the hollow cavity. The rotating spindle engages the drive nut which is separate from the gear elements (worm gear and helical gear) driving the spindle. The drive nut is located in a separate housing from the gear housing. The drive nut is also decoupled from its surrounding housing by an uncoupling element covering three faces of the drive nut. The third party asserts that the BMW Z3 includes radial bearing points for the spindle nut which are integrated in the housing parts of the gear housing and that it would be obvious to provide such bearing points for a drive worm.

As can be seen from the photographs of the drive unit used in the BMW Z3 (but not from U.S. Patent No. 5,349,878), the two parts of the gear housing are connected by plug-in connectors consisting of four pins at one of the parts in corresponding bores in the other part. After the pins have been inserted into the corresponding bores the two plates are finally secured and fixed to each other by plastically deforming the material in the area of the plug-in connections, namely by deforming the material of the pins.

The two parts of the gear housing are fixed in all three-dimensional directions. The plug-in connectors are the only means used to connect the two parts of the gear housing. BMW has represented to applicant that it was known in 1995 to connect two housing parts of a gear housing by means of plug-in connectors which are plastically deformed.

Exhibit B is a photograph of a drive unit which the third party asserts was used in a BMW E31 prior to 1998. Attached as Exhibit C is Internet information ("The Different Models of the 8 Series" (E31) (8 pages) and "Car Soft USA" (5 pages)) which indicates that the BMW E31 appears to have been offered and sold in the U.S. prior to 1998. Applicant has not confirmed that this drive unit was used in a BMW E31 or that a BMW E31 was in public use in the U.S. prior to 1998.

The photograph shows a rotating, threaded spindle which is driven by a gear unit located within a gear housing situated at one end of the spindle. The gear housing contains the gear elements used to drive the spindle and consists of two parts which are connected to each other by plug-in connectors. In order to finally secure and fix the two parts of the gear housing, the material of the gear housing is plastically deformed outside the area of the plug-in connectors. Therefore, the two parts of the gear housing are not solely fixed against each other at the plug-in connections but also outside those connections by plastically deforming the material in the area outside the plug-in connections. The threaded spindle engages a nut located within a housing which is situated approximately in the middle of the threaded spindle.

The third party claims that both the gear housing containing the gear elements used to drive the spindle, the housing containing the spindle nut and also the spindle itself are located within the hollow cavity defined by two rails of a seat rail assembly. The third party also asserts that the gear housing is screwed to one of the guide rails by making use of two fastening openings with internal threads provided at the gear housing and that it is obvious to provide a U-shaped holder with fastening openings having an internal thread in order to attach the holder to the upper rail. Applicant has not been able to verify the relevance of these remarks because applicant has not been shown the complete guide rail assembly of the BMW E31.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By _____

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626/795-9900

MEG/mee
Enclosures: PTO/SB/08A/B, w/references
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FORM PTO/SB/08A/B (10-01)
Substitute for PTO-1449A/B

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Attorney Docket Number	**40551/DBP/M521**
Application Number	09/647,899
Filing Date	October 6, 2000
Applicant(s)	Werner Taubmann, et al.
Group Art Unit	3634
Examiner Name	Gregory J. Strimbu

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	Cite No.[1]	DOCUMENT NUMBER Number - Kind Code[2] (If Known)	PUBLICATION DATE MM-DD-YYYY	NAME OF PATENTEE

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS	Cite No.[1]	Foreign Patent Document Country Code[3] - Number[4] - Kind Code[5] (If Known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T[6] (✓)

OTHER DOCUMENTS

EXAMINER INITIALS	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article, title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		Exhibit A - Photograph of BMW Z3, pp. 1-14
		Exhibit B - Photograph of BMW E31
		Exhibit C- Network Information - The different models of the 8-Series E31 (8 pages) +
		Internet Information - Carsoft USA (5 pages)

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EXAMINER SIGNATURE		DATE CONSIDERED	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1]Applicant's unique citation designation number (optional). [2]See Kinds Codes of USPTO Patent Documents at www.pto.gov or MPEP 901.4. [3]Enter Office that issued the document, by the two-letter code (WIPO standard ST.3). [4]For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5]Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6]Applicant is to place a check mark here if English Language Translation is attached.

MEG/llk